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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,321	01/12/2001	Markus Meyer	P-4355	2684

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EXAMINER

BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/760,321	Applicant(s) MEYER, MARKUS	
	Examiner Lewis A. Bullock, Jr.	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6,11-14,18,19,21 and 22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 4,6,11-14,18,19,21 and 22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/14/05.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4, 6, 12-14, 18, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by “An Extensible Architecture for Distributed Object System Interoperability” by Robert Byron Moore (MOORE).

As to claim 4, MOORE teaches a method comprising: creating a first object (bridge stub / view) using a runtime library (bridge library) (via the IDL converter and IDL bridge generator) (pg. 27, Automated Generation) wherein said first object is associated with a binary specification object (IDL / bridge template files / header file) (pg. 28, Bridge Stub/Proxy Generation; pg. 38; pg. 40) for a first execution environment and further wherein the binary specification object for the first execution environment includes information on each proxy (declarations of the object environment / interfaces of the components / halves) (pg. 36-37) running in said first execution environment wherein a proxy comprises a wrapped interface; creating a second object (bridge stub/ view) using a runtime library (bridge library) via the IDL converter and IDL bridge generator) (pg. 27, Automated Generation; pg. 38, Process Models; pg. 40) wherein said second object is associated with a binary specification object (IDL / bridge template files / header file) (pg. 28, Bridge Stub/Proxy Generation; pg. 38 and 40) for a second

execution environment and further wherein the binary specification object for the second execution environment includes information on each proxy (declarations of the object environment interfaces of the components / halves) running in the second execution environment (pg. 36-37); issuing a call for searching for a shared library (via the converter/generator using the bridge library to creating the mapping and views of the object system connection (pgs 27-37) wherein the bridge object (bridge) is used in mapping objects from the second execution environment (COM or CORBA environment) to the first execution environment (CORBA or COM environment); and using the bridge object (bridge) to generate a proxy wrapping an interface (interface / view / connection) in the second execution environment (pg. 27-37). See also pg. 40 and 41 which details the objects and components created by the IDL converter/Bridge generator.

As to claim 6, MOORE teaches a method for using functionality in a second execution environment (COM environment / CORBA environment) in a first execution environment (CORBA environment / COM environment) comprising: calling a method in a proxy interface (view / stub) in the first execution environment wherein the proxy interface is included in a bridge (bridge) comprising a shared library (bridge library) and the first execution environment includes a binary specification (IDL / bridge template files / header files) (pg. 28, Bridge Stub/Proxy Generation; pg. 38 and 40) having a common identity structure (declarations and mappings of object environment); and converting the method call by the proxy interface to a corresponding method call (via

the bridge / stubs converting calls to/from flat C interfaces calls to be understood by the system) for execution in the second execution environment, wherein the converting the method call further comprises: using a type description to convert parameters from the first execution environment to the second execution environment (via data type conversion / mapping) (pg. 41-44).

As to claim 12, refer to claim 6 for rejection.

As to claims 13 and 14, MOORE teaches executing the corresponding method call in the second execution environment, and returning results of the execution to the proxy interface and using a type description to convert the returned results from the second execution environment to the first execution environment (via returning values or using a subsequent connection back to the requesting environment) (pg. 43; pg. 40-42).

As to claims 18, 19, 21 and 22, reference is made to a program product that corresponds to the method of claims 12, 13 and 14 and is therefore met by the rejection of claims 12, 13 and 14 above.

3. Claims 6, 12-14, 18, 19, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by "COM-CORBA Interworking RFP, Part A" by Digital Equipment Corporation (DEC).

As to claim 6, DEC teaches a method for using functionality in a second execution environment (CORBA system / COM system) in a first execution environment (COM system / CORBA system) comprising: calling a method in a proxy interface (view) in the first execution environment wherein the proxy interface is included in a bridge (pg. 17, figure 2-2, 2nd paragraph, "We refer to the entire entity that provides the mapping as a bridge." – which would include the views) comprising a shared library (library having code for mapping between objects) (pg. 45, Interworking Solutions, "code for libraries that map the IDL interfaces into OLE.") and the first execution environment includes a binary specification (IDL primitives / data types / properties) having a common identity structure (via the IDL primitives / data types / properties are implemented in their proper structure/format or is mapped to a common structure/format) (pg. 21); and converting the method call by the proxy interface to a corresponding method call (request) for execution in the second execution environment (CORBA System / COM system) and dispatching the method call to the second environment after the conversion wherein the converting comprises: using a type description (mapping) to convert parameters from the first execution environment to the second execution environment (see page 45; pg. 17-22)

As to claim 12, refer to claim 6 for rejection.

As to claims 13 and 14, DEC teaches dispatching the method call for execution in the second execution environment to the second execution environment (COM to

CORBA or vice versa) by the proxy interface wherein the parameters sent / results returned are converted between execution environments by a proxy interface using a type description (mapping) (see page 45; pg. 17-22).

As to claims 18, 19, 21 and 22, reference is made to a program product that corresponds to the method of claims 12, 13 and 14 and is therefore met by the rejection of claims 12, 13 and 14 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over "COM-CORBA Interworking RFP, Part A" by Digital Equipment Corporation (DEC).

As to claim 11, DEC teaches communication between environments wherein one environment communicates with another environment through a proxy interface that translates method calls from one environment to another. DEC teaches that the environments are COM and CORBA. However, DEC does not teach that the environments use C++ programming language. Official Notice is taken in that the COM environment has C++ constructs and that it would be obvious to one skilled in the art

that the COM environment is a C++ programming language execution environment that communicates with another environment.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over “An Extensible Architecture for Distributed Object System Interoperability” by Robert Byron Moore (MOORE).

As to claim 11, MOORE teaches communication between environments wherein one environment communicates with another environment through a proxy interface that translates method calls from one environment to another (via the bridge generating a view of the other environment for a client environment and allows for communication and conversion of request / results to the environments) (pg. 16). MOORE teaches an exemplary environments being COM and CORBA. However, MOORE does not allude that the environments use C++ programming language. Official Notice is taken in that the COM environment has C++ constructs and that it would be obvious to one skilled in the art that the COM environment is a C++ programming language execution environment that communicates with another environment.

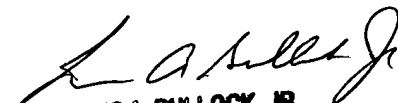
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 28, 2005



LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER